UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,695	01/27/2004	Paolo Narvacz	085317-0307825	2066

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EXAMINER
BARON, HENRY

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/766,695	NARVAEZ, PAOLO
	Examiner	Art Unit	
	Henry Baron	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after t he mailing date of this com munication, even if timely filed, may re duce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 January 2004</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-45</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-12, 20-29 and 42-45</u> is/are rejected.
7)☒ Claim(s) <u>13-19 and 30-41</u> is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on <u>27 January 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
   1.☐ Certified copies of the priority documents have been received.
   2.☐ Certified copies of the priority documents have been received in Application No. _____.
   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>1/28/2005</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claim 25 is objected to because of the following informalities: The antecedent of 'tag checker' in

Claim 25 is in Claim 23, not Claim 22 and has been examined this way. Appropriate correction is

required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections

set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-12, 20-29, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buskirk (U.S. Patent Application 2002/0191543) in view of Mann (U.S. Patent 6957281).

4.   With regards to Claim 1 and 22, Buskirk teaches a data classifier and method of classifying data in a

data classifier deployed in a network device with ports coupled to a heterogeneous communications

network (3: [0033+] read multiple packet flow and multiple protocols) the method comprising the steps

of: receiving a data packet at a port of the network device, the data packet including a first portion; (4:

[0049] read parsing engine perform layer classification) receiving the first portion of the data packet at the

data classifier; extracting a plurality of tags and a logical port identifier (ID) from the first portion

(4:[0049] parsing engine performs layer classification and tagging); determining data attributes (flow ID)

representative of a network service on the heterogeneous communications network associated with the

data packet (6:[0060] flow is identified upon arrival of frame header); and priority ID (6:[0061] read

priority fields in header to classify flows).

5.   However Buskirk is silent with regards to combining the flow ID and the priority ID to create a queue

ID.

6. Mann teaches a method for determining a priority ID (6: [0030-0035] read priority level) and flow ID (6: [0030-0035] read session identification) level of inbound packets transmitted over a heterogeneous network and combining the flow ID and the priority ID to create a queue ID (6: [0014-0023] and Figure 3 for queue ID read packet bundle descriptor).

7. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the flow/priority ID packet classification teachings of Buskirk with the queue ID as taught by Mann.

8. The modified teachings would be advantageous in optimally transferring packet groups across the network based on flow and priority ID with a scheduler such as that shown, for example, in Mann Figure 2. In this manner, packets can be aggregated into flows and transmitted on a priority basis per network Service Level Agreements (SLA).

9. With regards to Claims 2, 3, 23 and 24, Buskirk teaches the step where the type of a received packet is checked to match with the received port; and if the packet type and port do not match generating an error tag. (4: [0048] read pre-processor performs packet verification and discarding, packet protocol identification).

10. In reference to Claims 4 and 25, Buskirk teaches of storing the tags in a tag memory. (4: [0048] read results of pre-processor are stored in memory)

11.In reference to Claims 5 and 26, Buskirk teaches of determining a flow ID by reading tags from tag memory (6: [0060] and Figure 6 read memory Figures Element (FE) 622 identify flow/fetch parameters FE 620).

12.In reference to Claims 8 and 29, Buskirk teaches of the network service to include, generically, a local area network service – which can either be public or private. (3: [0037]).

13. With regards to Claim 9, Buskirk teaches that the flow Id is determined using tags and logical ports. (6: [0060] read classifier module classifies flow of incoming stream into separate logical flows and (6: [0061] flows can be based on packet header, packet type, etc.).

14. In reference to Claims 10 and 11, Buskirk teaches flow ID based on sender and receiver of packet. Though Buskirk teaches of classification based on the IP address, Buskirk also teaches that flow can be determined by monitoring any particular field of the packet header, e.g. MAC (6: [0061]) or input/output flow ID.

15. With reference to Claim 12, Buskirk teaches (6: [0061]) teaches flow ID based on the packet header, e.g. MAC (6: [0061])

16. With regard to Claims 20 and 21, Buskirk teaches (3: [0038]) of priority ID based on plurality of tags (e.g. bandwidth, jitter, latency, etc.).

17. With regards to Claims 42 and 43, Buskirk teaches that the data classifier can be fabricated on a single functional block of a single die. (4: [0044]).

18. With reference to Claims 6-7, 27-28, and 44-45, Buskirk and Mann teach the limitations of Claim 1, and, further Buskirk teaches of a flow ID based on the packet header, e.g. MAC (6: [0061]).

Allowable Subject Matter

21. Claims 13-19 and 30-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Baron whose telephone number is (571) 270-1748. The examiner can normally be reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema

Rao can be reached on (571) 272-3174. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

24. Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

SEEMA S. RAO   7/9/07
SUPERVISORY PATENT EXAMINER
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